

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/047,581	10/23/2001	John H. Stevens	HRT-287	4692	
27777	7590 07/14/2005		EXAM	INER	
PHILIP S. J	OHNSON		ISABELLA	, DAVID J	
JOHNSON &	JOHNSON ON & JOHNSON PLAZA		ART UNIT	ART UNIT PAPER NUMBER	
NEW BRUNSWICK, NJ 08933-7003			3738		

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



	Application No.	Applicant(s)				
	10/047,581	STEVENS, JOHN H.				
Office Action Summary	Examiner	Art Unit				
	DAVID J. ISABELLA	3738				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE!	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 28 Ap	oril 2005.					
2a) This action is <b>FINAL</b> . 2b) ⊠ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
•—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4) Claim(s) <u>15-32 and 42-44</u> is/are pending in the	☑ Claim(s) 15-32 and 42-44 is/are pending in the application.					
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.	•					
6)⊠ Claim(s) <u>15-32 and 42-44</u> is/are rejected.						
7) Claim(s) is/are objected to.	r alastian raquirament	•				
8) Claim(s) are subject to restriction and/o	r election requirement.	·				
Application Papers						
9) The specification is objected to by the Examine						
10) The drawing(s) filed on is/are: a) acc						
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex						
TT) The bath of declaration is objected to by the Ex	diffiller. Note the attached Office	Action of form 10-102.				
Priority under 35 U.S.C. § 119						
<ul><li>12) ☐ Acknowledgment is made of a claim for foreign</li><li>a) ☐ All b) ☐ Some * c) ☐ None of:</li></ul>	priority under 35 U.S.C. § 119(a)	)-(d) or (f).				
1. Certified copies of the priority document						
2. Certified copies of the priority document						
<ol> <li>Copies of the certified copies of the prior</li> <li>application from the International Bureau</li> </ol>		ed III tilis National Stage				
* See the attached detailed Office action for a list		ed.				
See the attached detailed Office detail for a list						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> </ul>	Paper No(s)/Mail Da 5) Notice of Informal F	ate Patent Application (PTO-152)				
Paper No(s)/Mail Date	6) Other:	· ,				

## Status of the Claims

Claims 1-14 and 33-41 have been cancelled and claims 15-32,42-44 remain in this application.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 15-32,42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peale or Rygg (4218782) in view of Lazarus (5104399) or Sakura, Jr (4214587) The device of Peale may be inserted into the natural conduit but must rely on strict adherence to sizing diameters to match the diameter of the natural conduit. Sakura, Jr allows for direct attachment of the valve of Peale to the natural conduit without strict adherence to matching diameters thus alleviating the need for frictional fit. Moreover the spring of Sakura, Jr allows the attaching vessel to pulsate in a fashion similar to that of the natural conduit. It would have been obvious to one with ordinary skill in the ad to attach the vessel of Peale to the natural conduit via a compressible spring member as shown by Sakura, Jr. With respect to claim 29, clearly the spring is capable of being balloon expandable as broadly claimed...

The device of Rygg includes a valve for implantation comprising a flexible sleeve having proximal and distal ends; and at least one cusp configured to permit blood flow

through the sleeve in a single direction and one ring attached to the sleeve. While the device of Rygg may be inserted into the natural conduit, the device is sutured to the adjacent tissues of the natural conduit. .Lazarus teaches the combination of tubular vascular device comprising a cylindrical radially resilient spring formed with outwardly extending fasting elements for attaching a vessel to a natural conduit. Lazarus allows for direct attachment of the sleeve/valve to the natural conduit without strict adherence to matching diameters and the complexities surrounding the use of sutures. Moreover the spring/fastening combination of Lazarus will allows the attaching vessel to pulsate in a fashion similar to that of the natural conduit. It would have been obvious to one with ordinary skill in the art to attach the sleeve/valve of Rygg to the natural conduit via a compressible spring member as shown by Lazarus. With respect to claim 29, Lazarus teaches the use of a balloon to expand the radially resilient spring/fastening elements to attach the sleeve to the natural conduit.

Likewise, Sakura, Jr teaches a anastomosis device comprising a cylindrical radially resilient spring formed with outwardly extending fasting elements for attaching a vessel to a natural conduit. It would have been obvious to one with ordinary skill in the art to attach the sleeve/valve of Rygg to the natural conduit via a compressible spring member as shown by Sakura, Jr.

Claims 16,17,18,19,20, see figures 11 and 12 of Rygg.

Claim 21, see mounting ring located at the proximal and distal ends of the sleeve of Lazarus.

Claim 22, see combination of Sakura, Jr.

Art Unit: 3738

Claims 23-28, see Rygg as modified by either of Lazarus or Sakura, Jr.

Claim 29-32, see expandable combination as taught by Rygg and Lazarus.

Claims 42-44, see fasteners of Lazarus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID J ISABELLA whose telephone number is 703-308-3060. The examiner can normally be reached on MONDAY-FRIDAY.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CORRINE MCDERMOTT can be reached on 703-308-2111. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> Primary Exalminer Art Unit 3738

DJI May 9, 2005